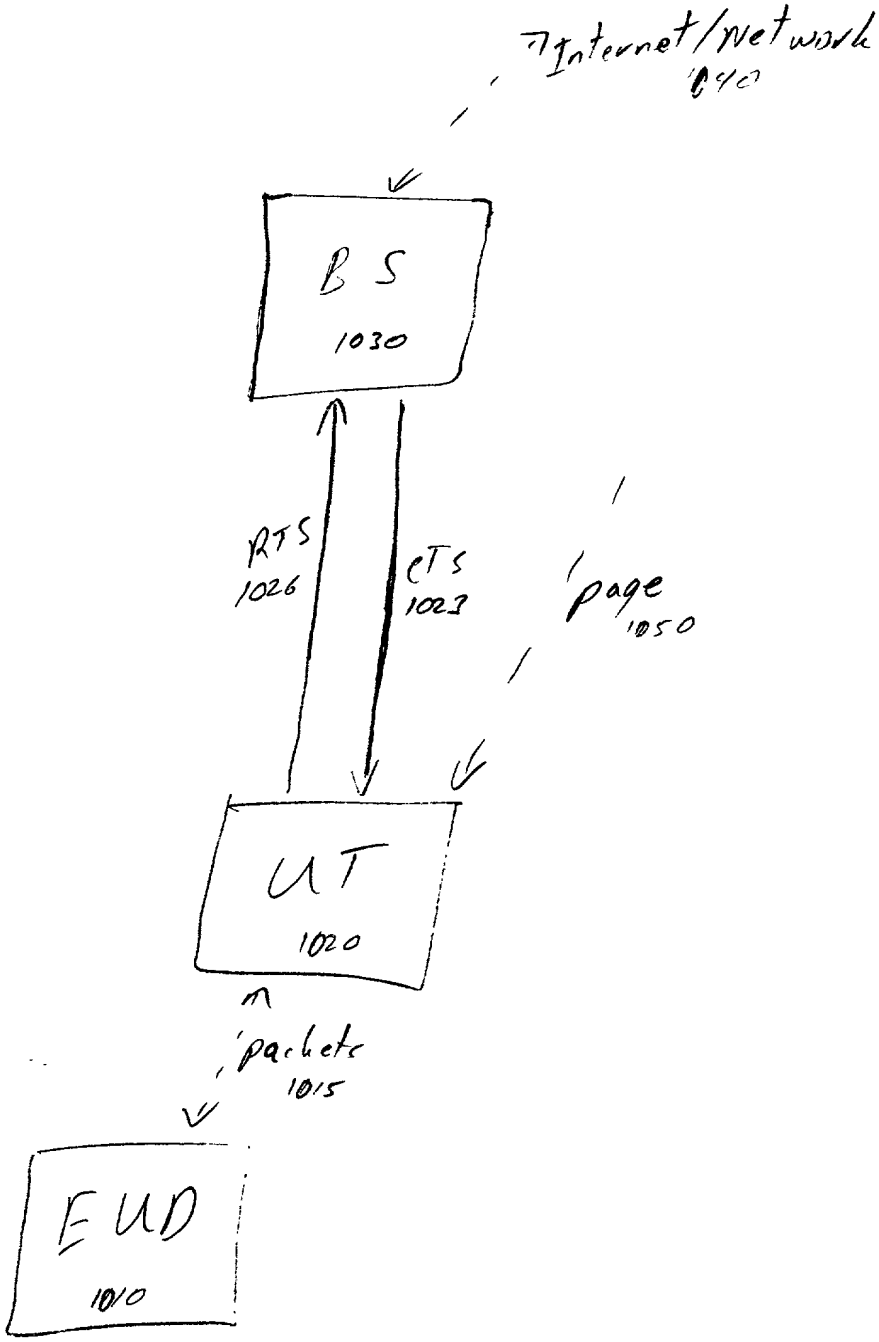
Internet/network
1040
BS
1030
RTS
1026
CTS
1027
page
1050
UT
1020
packets
1015
EUD
1010

Fig. 1A

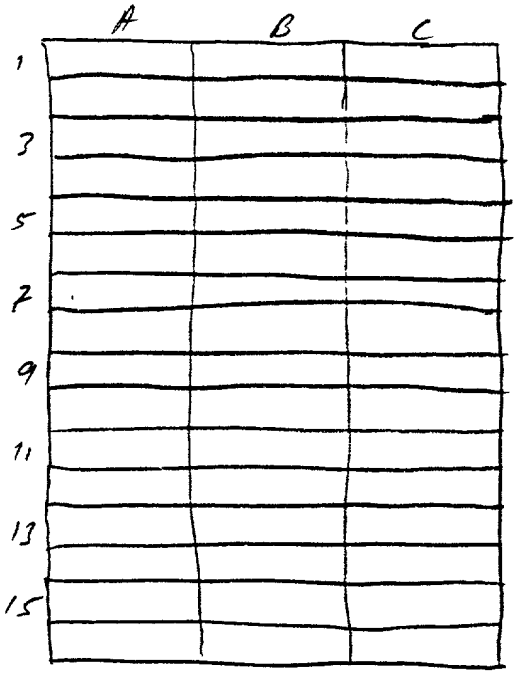

Fig. 1B

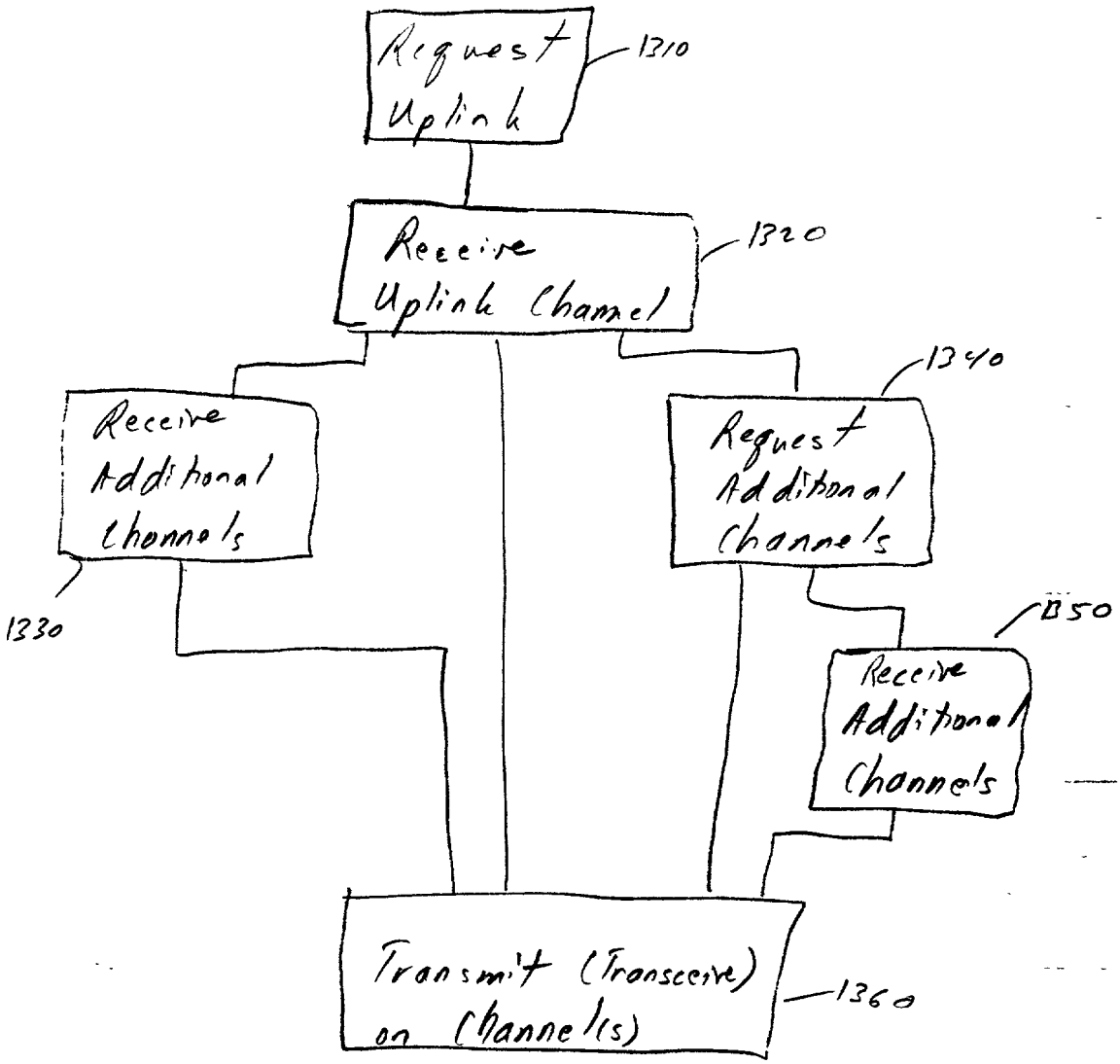
Request Uplink
1310
Receive Uplink Channel
1320
Receive Additional Channels
1330
Request Additional Channels
1340
Receive Additional Channels
1350
Transmit (Transceive) on Channel(s)
1360

Fig. 2

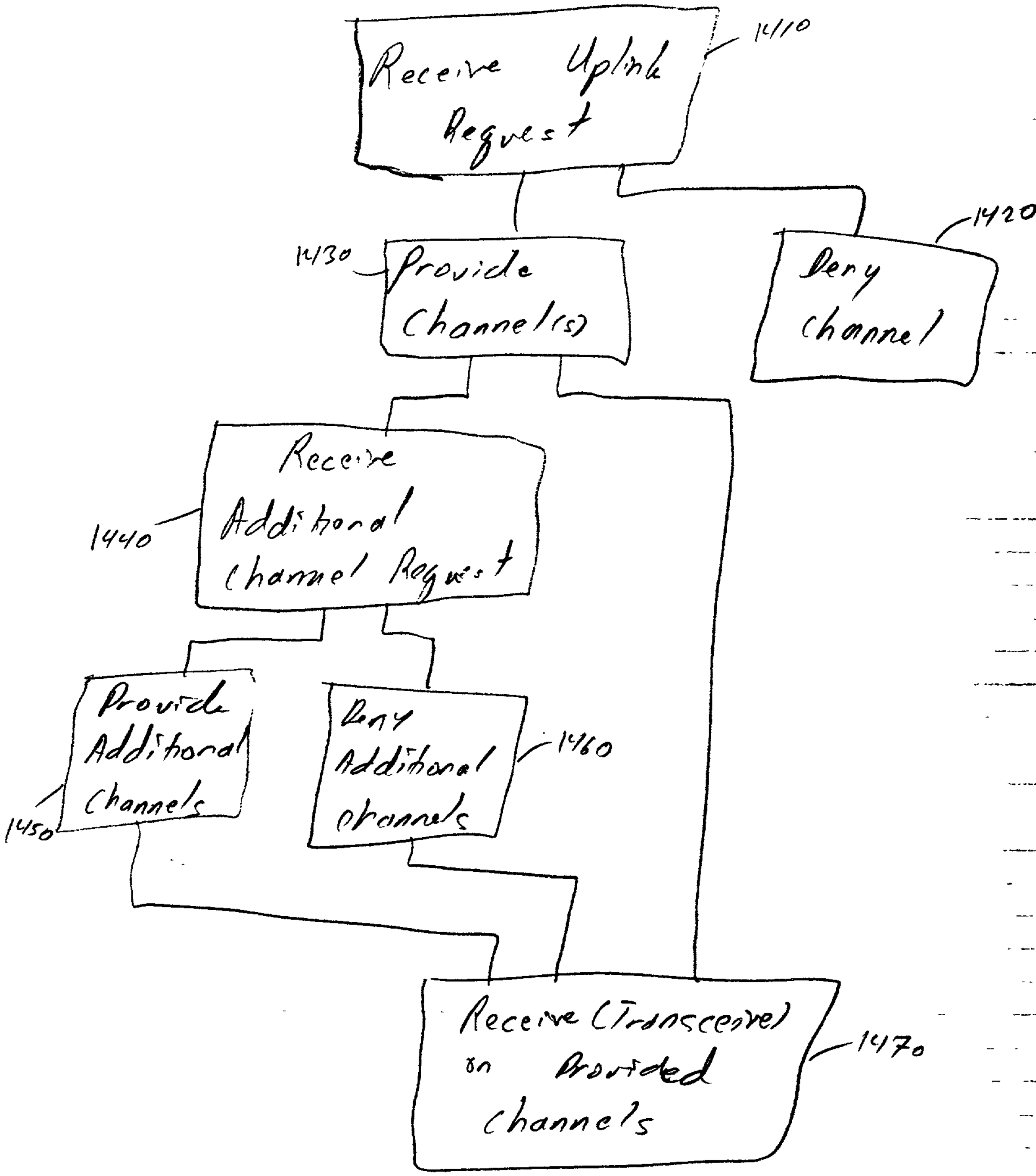
Receive Uplink Request
1410
Deny channel
1420
1430
Provide Channel(s)
Receive Additional channel Request
1440
Provide Additional Channels
1450
Deny Additional channels
1460
Receive (Transceive) on Provided Channels
1470

Fig. 3

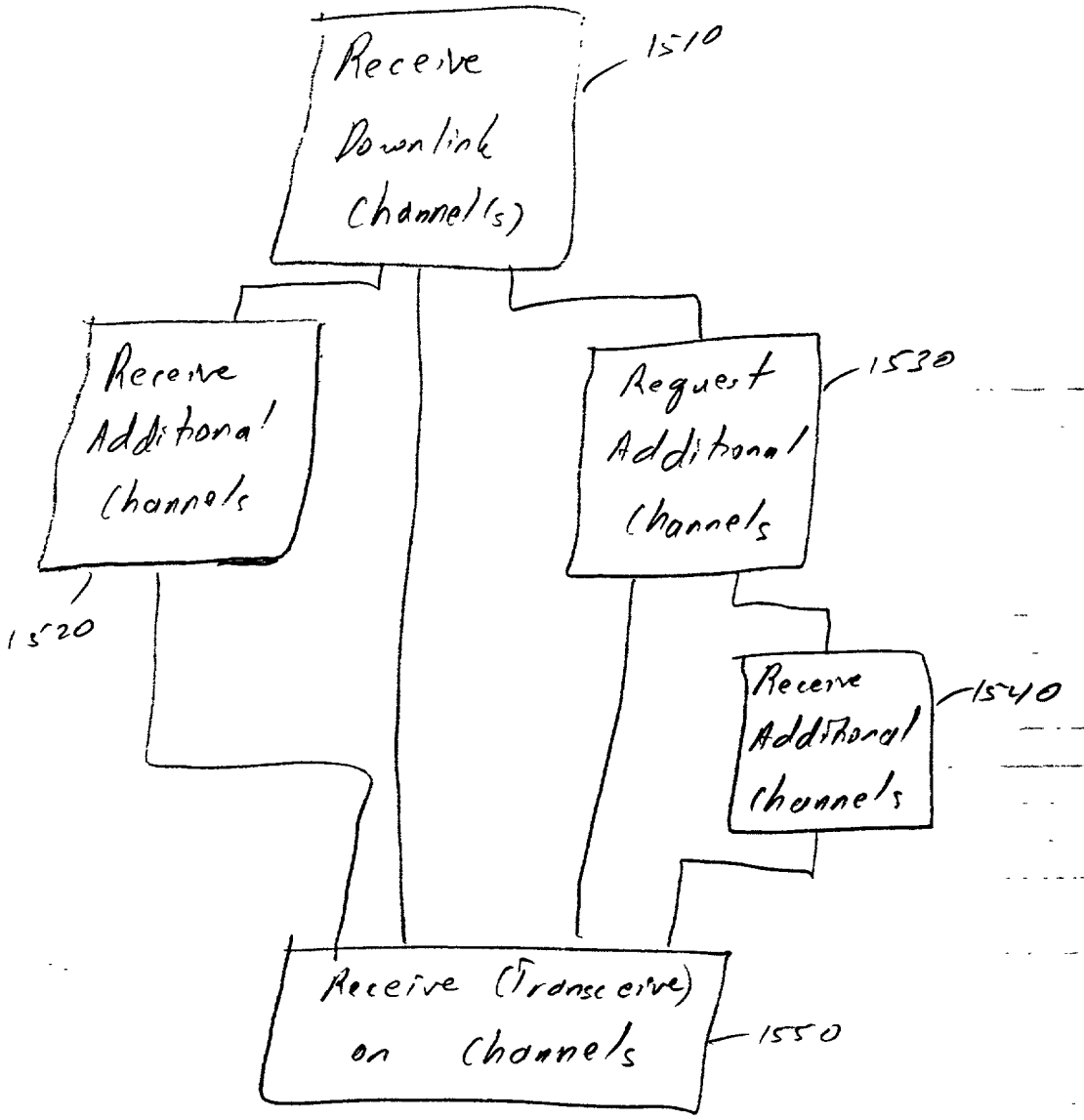
Receive Downlink Channel(s)
1510
Receive Additional Channels
1520
Request Additional Channels
1530
Receive Additional Channels
1540
Receive (Transceive) on Channels
1550

Fig. 4

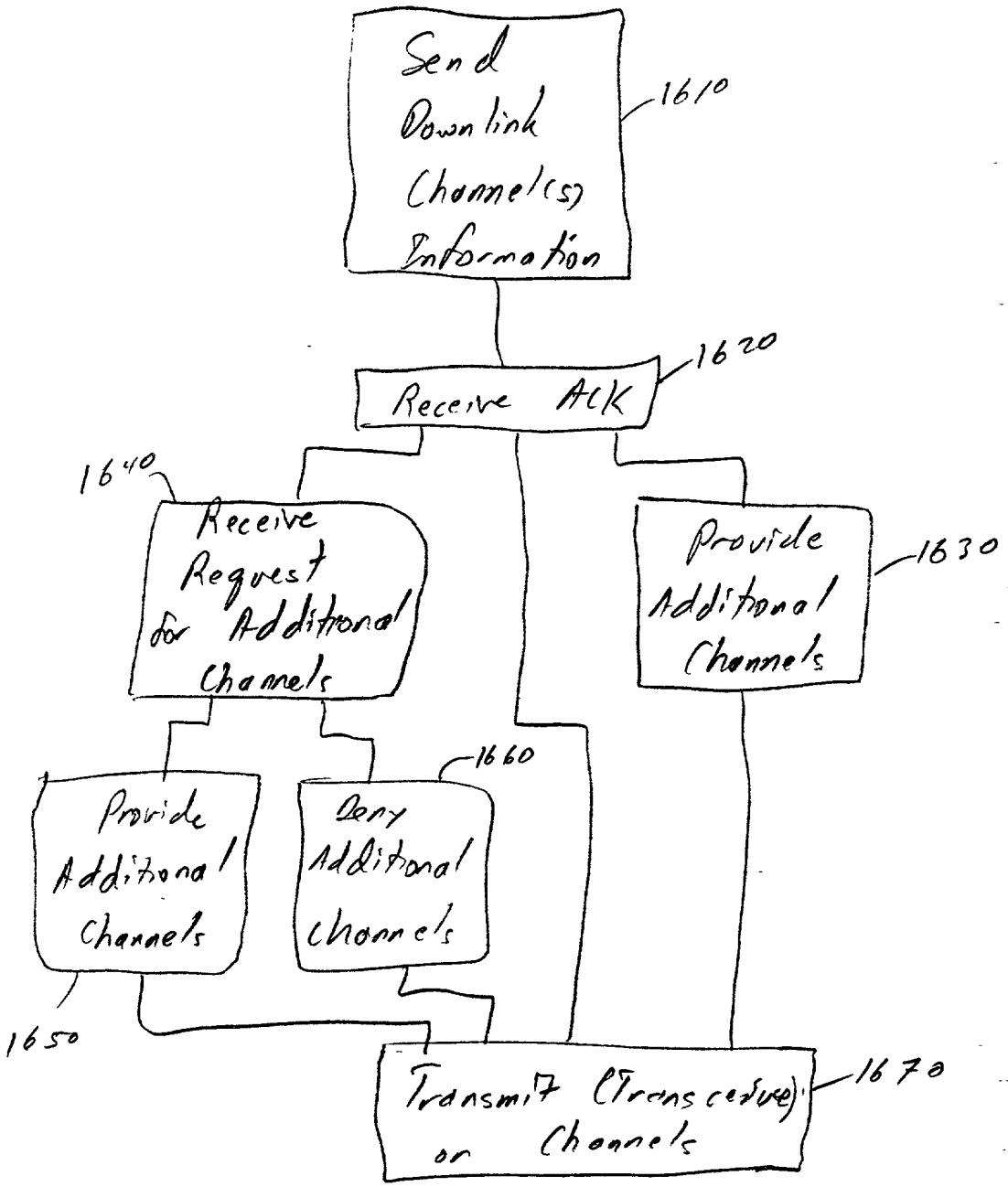
Send Downlink Channel(s) Information
1610
Receive ACK
1620
1640
Receive Request for Additional Channels
Provide Additional Channels
1630
1660
Provide Additional Channels
Deny Additional Channels
1650
Transmit (Transceive) on Channels
1670

Fig. 5

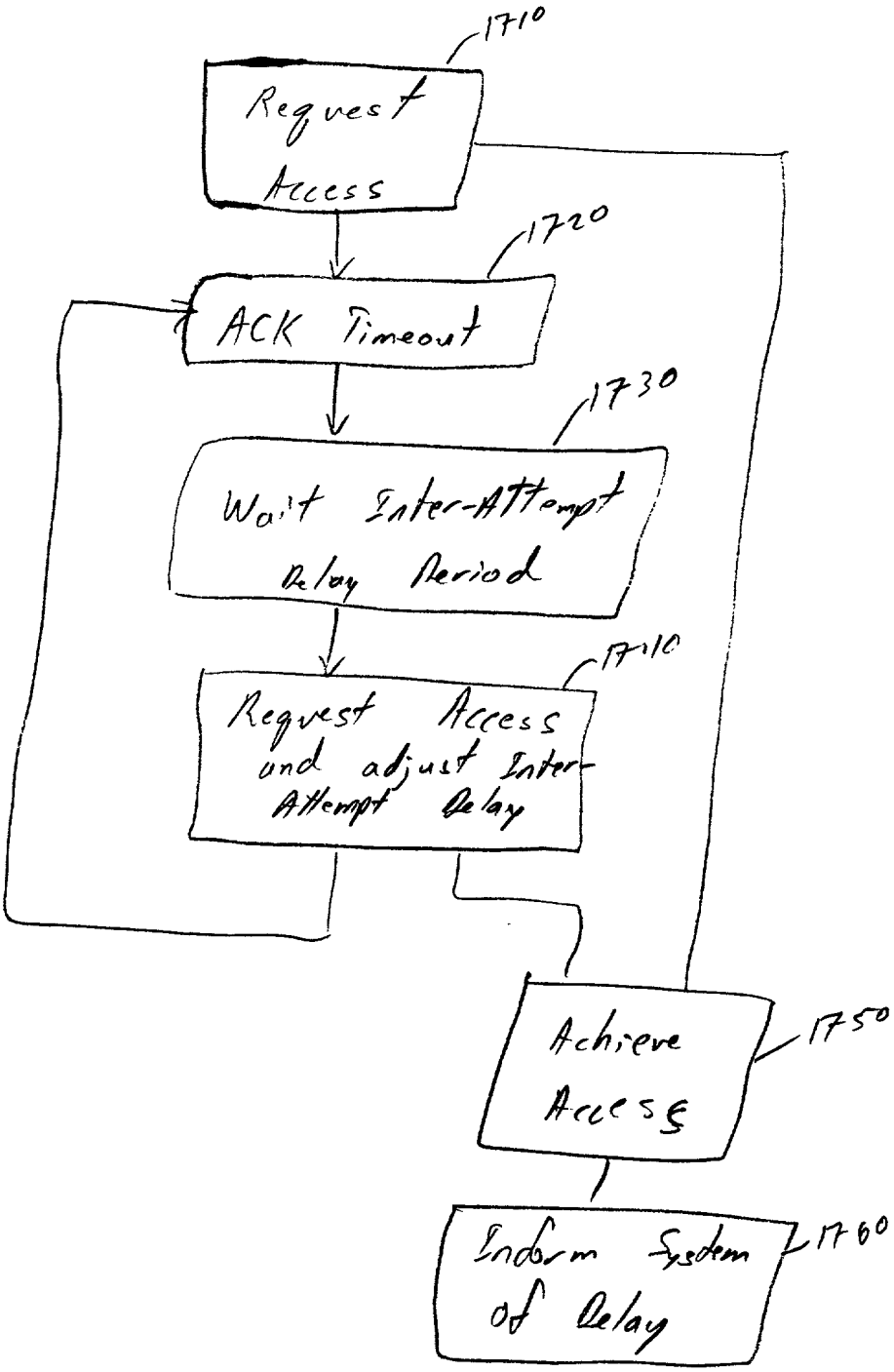
1710
Request Access
1720
ACK Timeout
1730
Wait Inter-Attempt Delay Period
1740
Request Access and adjust Inter-Attempt Delay
1750
Achieve Access
1760
Inform System of Delay

Fig. 6

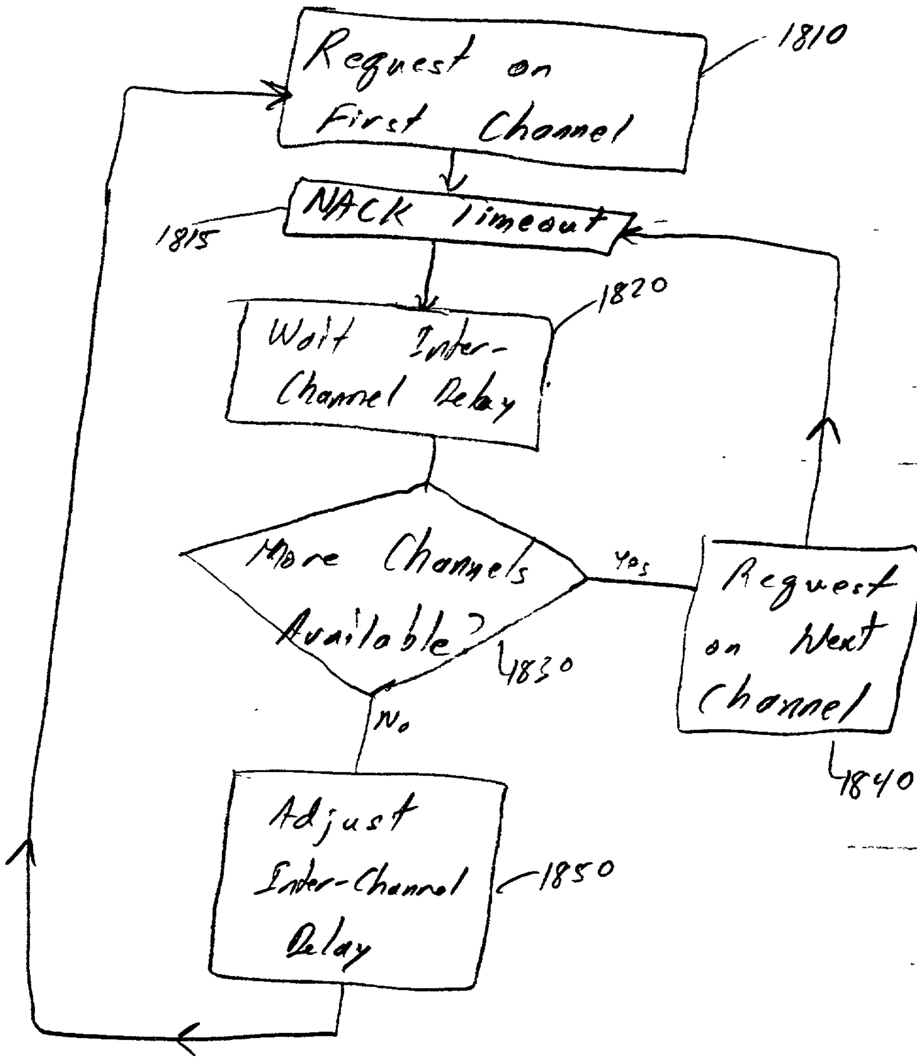
Request on First Channel
1810
NACK Timeout
1815
Wait Inter-Channel Delay
1820
More Channels Available?
1830
Yes
No
Request on Next Channel
1840
Adjust Inter-Channel Delay
1850

Fig. 7

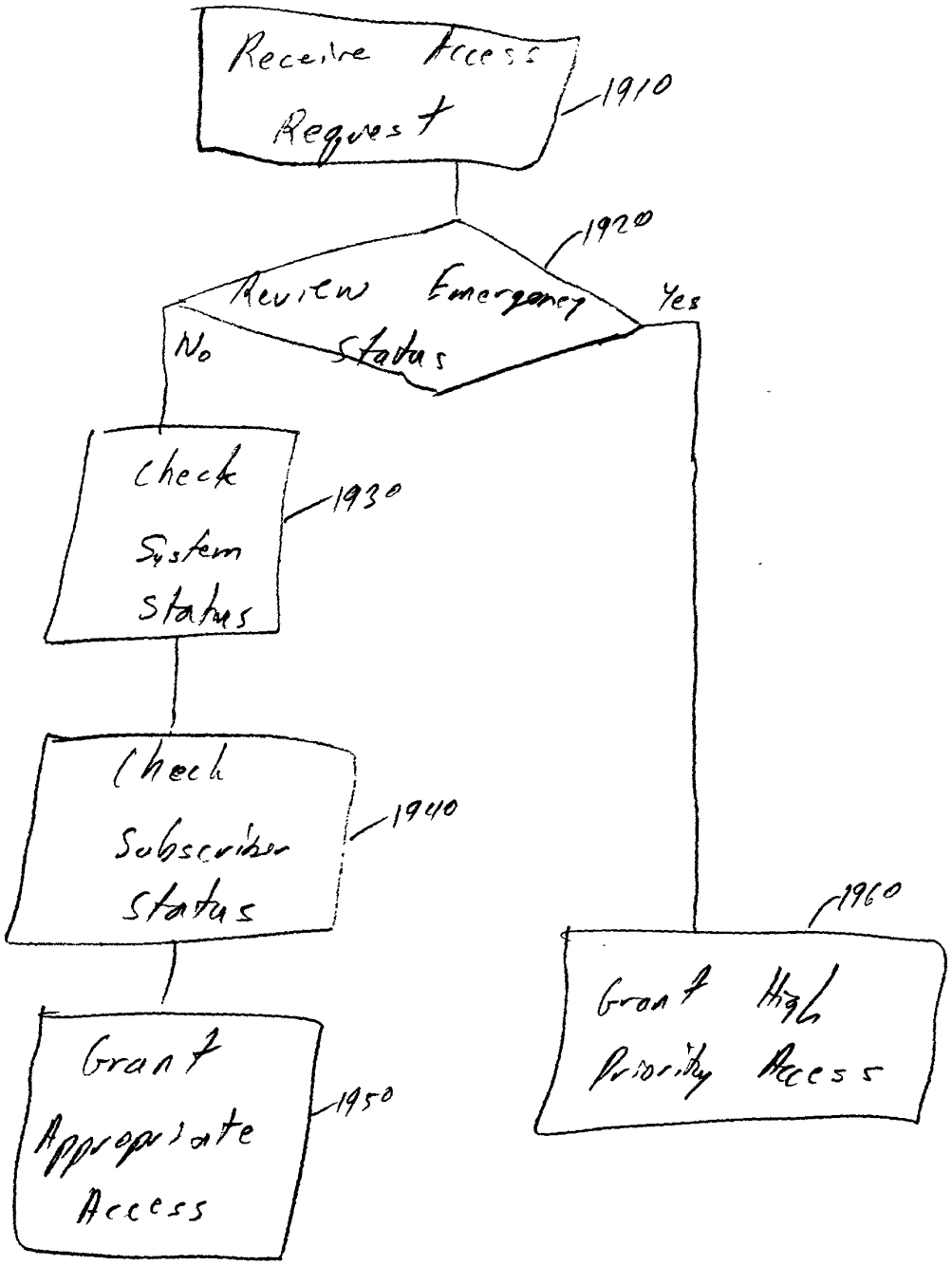
Receive Access Request
1910
Review Emergency Status
1920
Yes
No
Check System Status
1930
Check Subscriber Status
1940
Grant Appropriate Access
1950
Grant High Priority Access
1960

Fig. 8

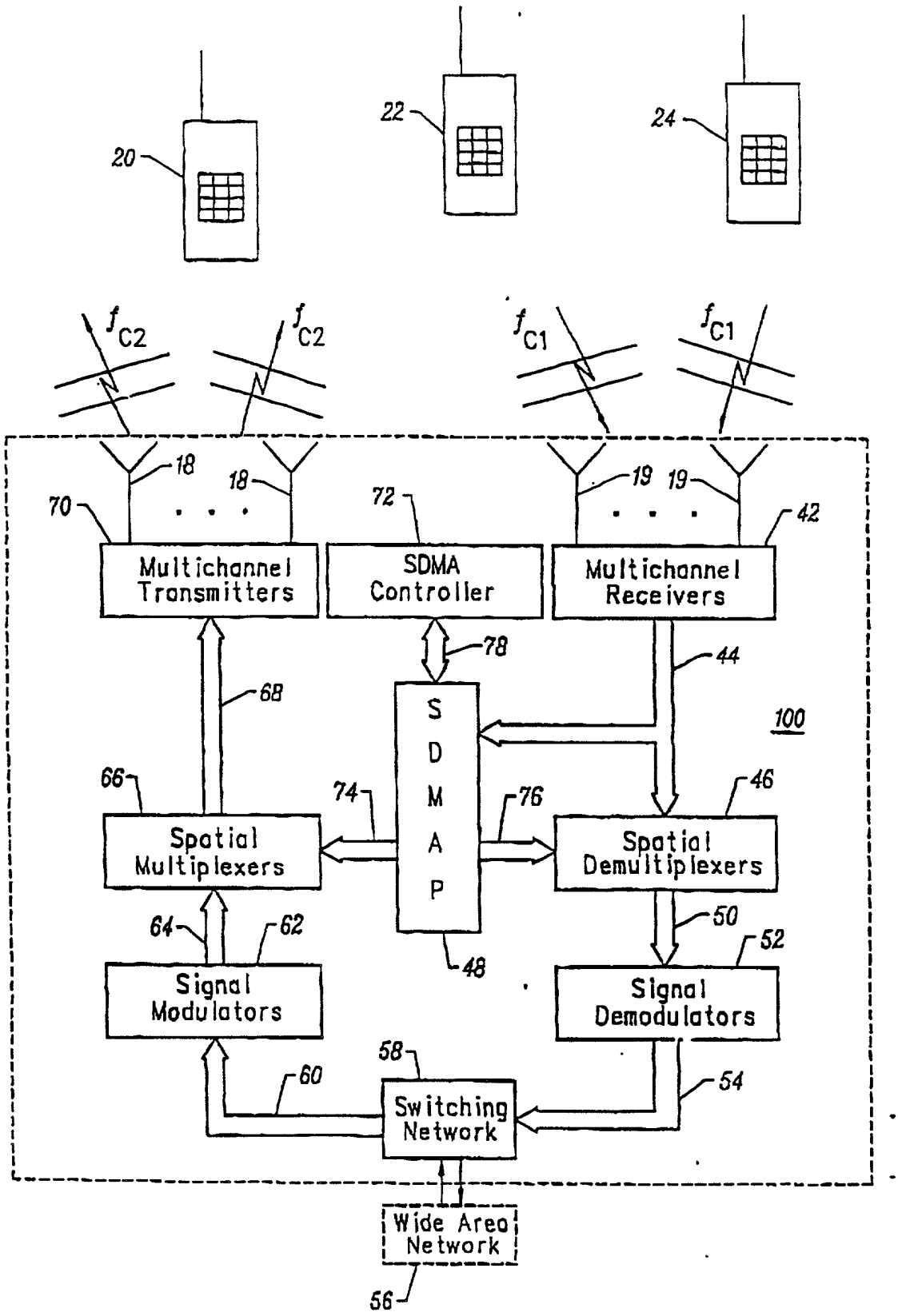
20
22
24
f_{C2}
f_{C2}
f_{C1}
f_{C1}
18
18
19
19
70
72
42
Multichannel Transmitters
SDMA Controller
Multichannel Receivers
78
44
68
100
S
D
M
A
P
66
74
76
46
Spatial Multiplexers
Spatial Demultiplexers
64
62
50
52
Signal Modulators
Signal Demodulators
58
60
54
Switching Network
Wide Area Network
56

FIG. 9

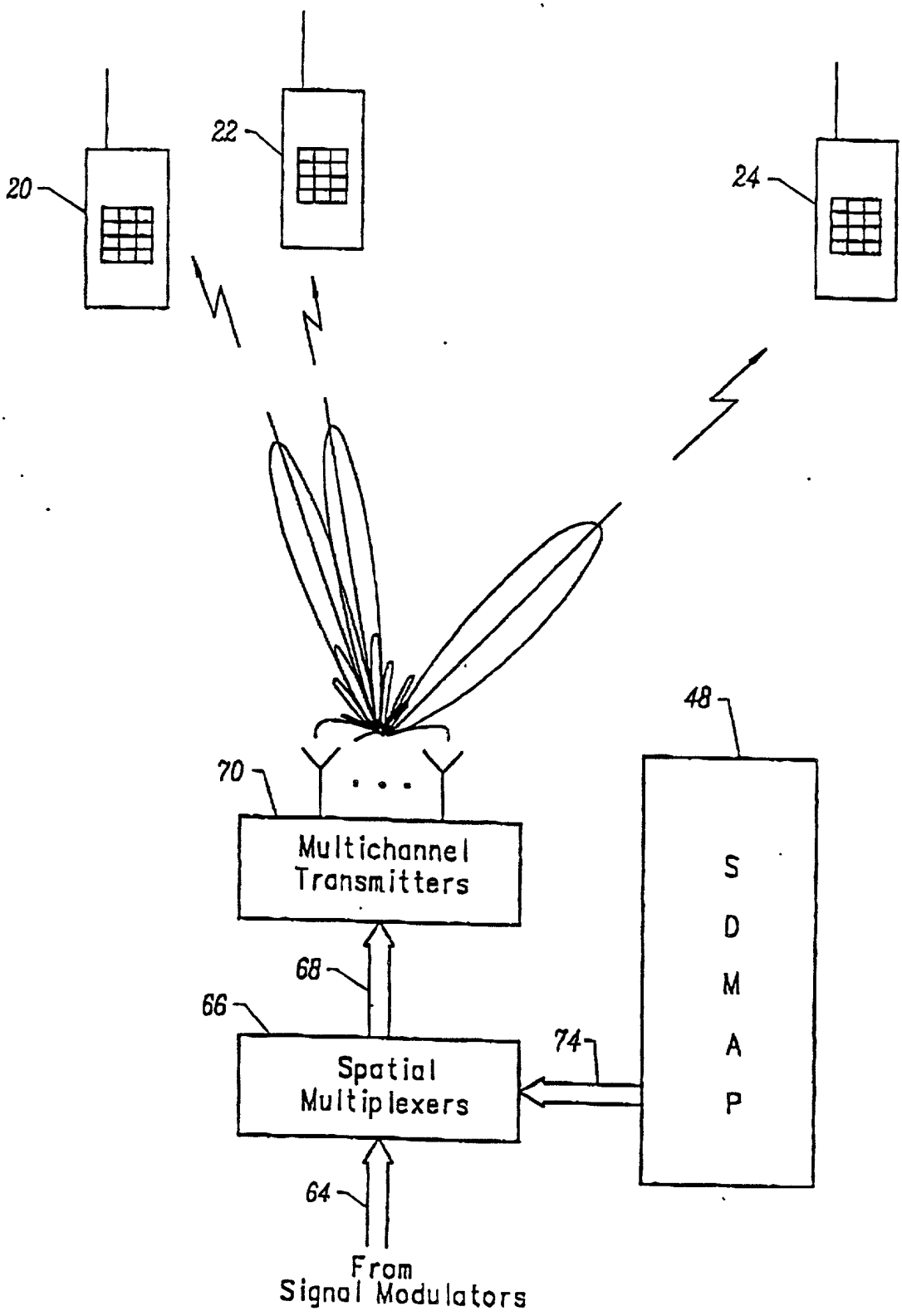
20
22
24
48
70
Multichannel Transmitters
68
66
Spatial Multiplexers
74
S
D
M
A
P
64
From Signal Modulators

FIG. 10

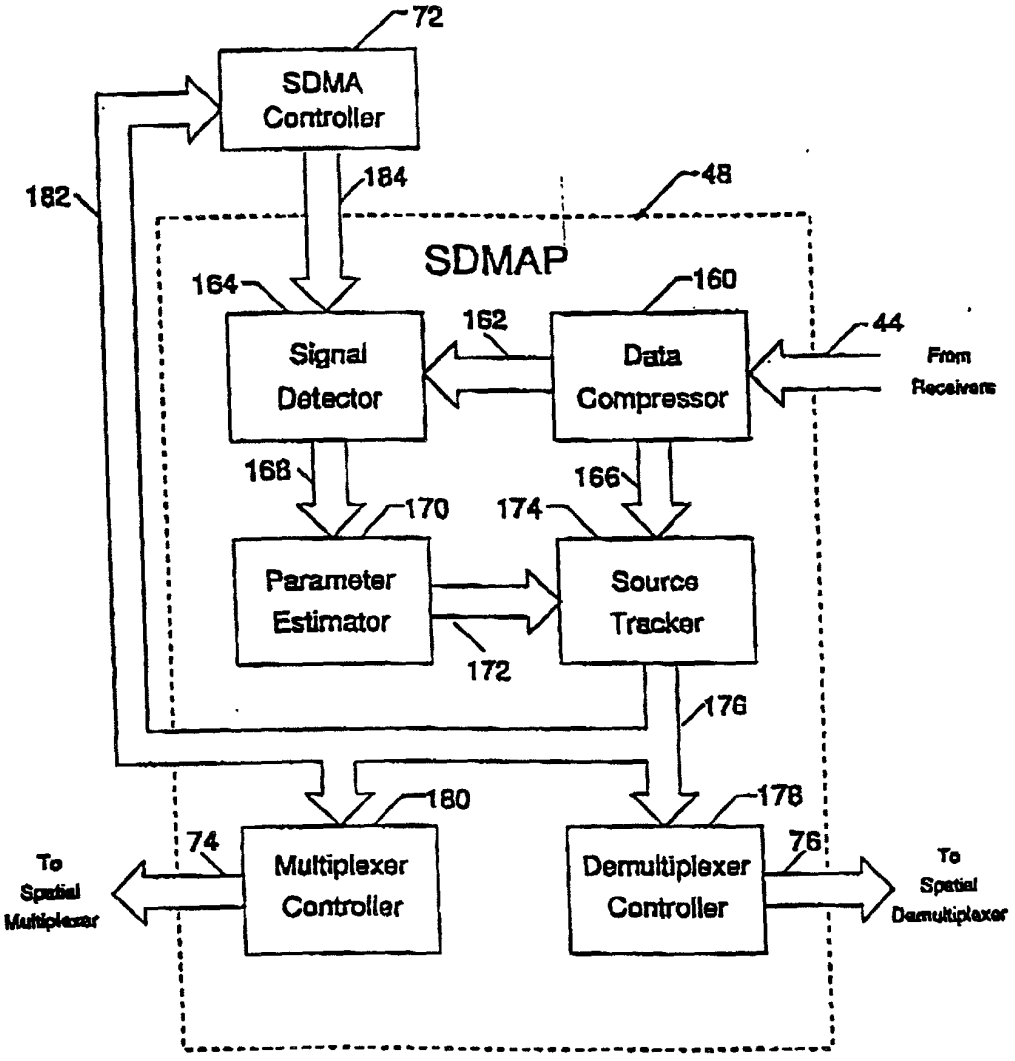
72
SDMA Controller
182
184
48
SDMAP
164
160
162
44
Signal Detector
Data Compressor
From Receivers
168
166
170
174
Parameter Estimator
Source Tracker
172
176
180
178
74
76
To Spatial Multiplexer
Multiplexer Controller
Demultiplexer Controller
To Spatial Demultiplexer

FIG. 11

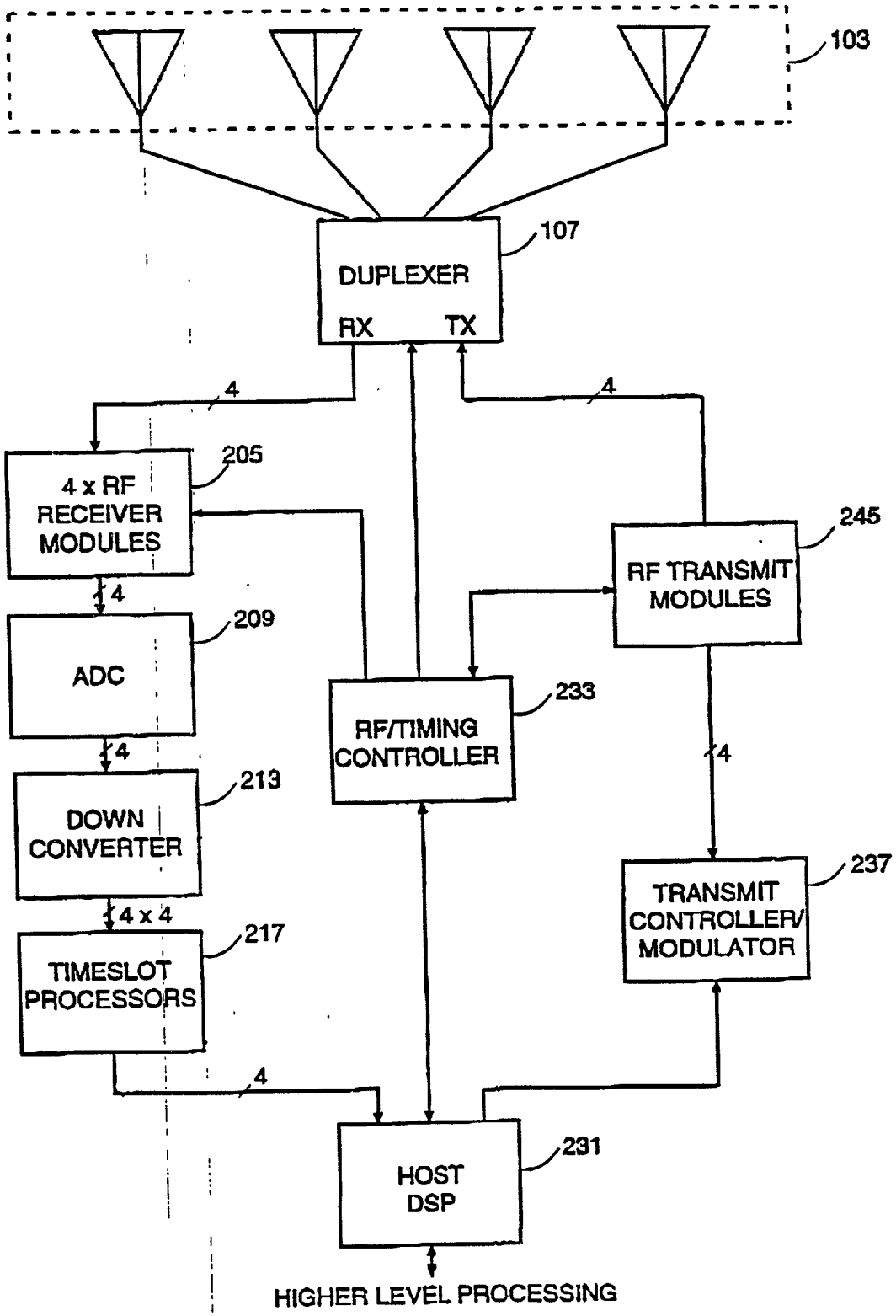
103
DUPLEXER
RX
TX
107
4
4
4 x RF
RECEIVER
MODULES
205
4
ADC
209
4
DOWN
CONVERTER
213
4 x 4
TIMESLOT
PROCESSORS
217
RF/TIMING
CONTROLLER
233
RF TRANSMIT
MODULES
245
4
TRANSMIT
CONTROLLER/
MODULATOR
237
4
HOST
DSP
231
HIGHER LEVEL PROCESSING

Figure 12

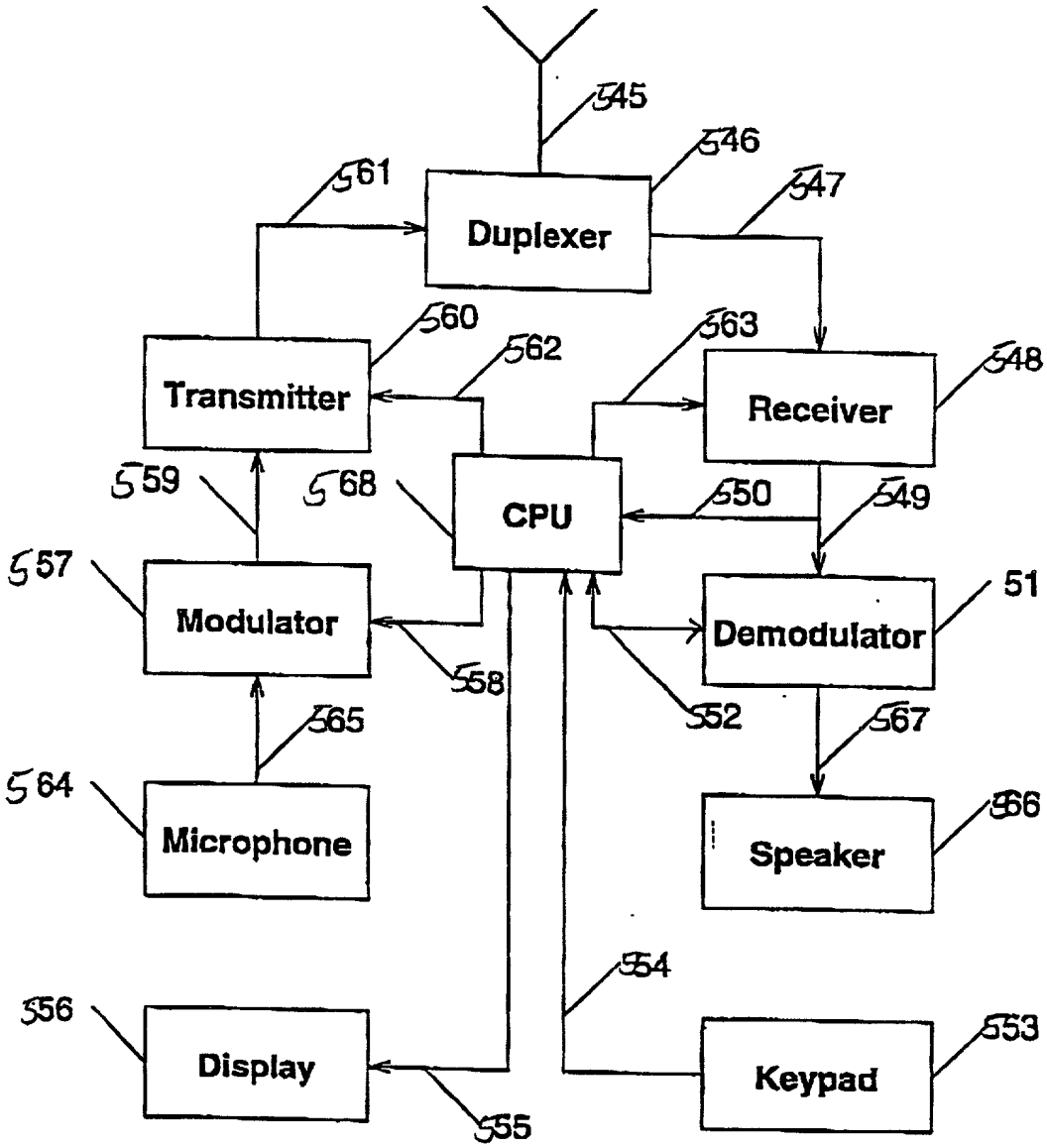
545
546
547
561
Duplexer
560
562
563
548
Transmitter
Receiver
559
568
550
549
CPU
557
Modulator
Demodulator
51
558
552
567
565
564
Microphone
Speaker
566
554
556
Display
Keypad
553
555

FIG. 13

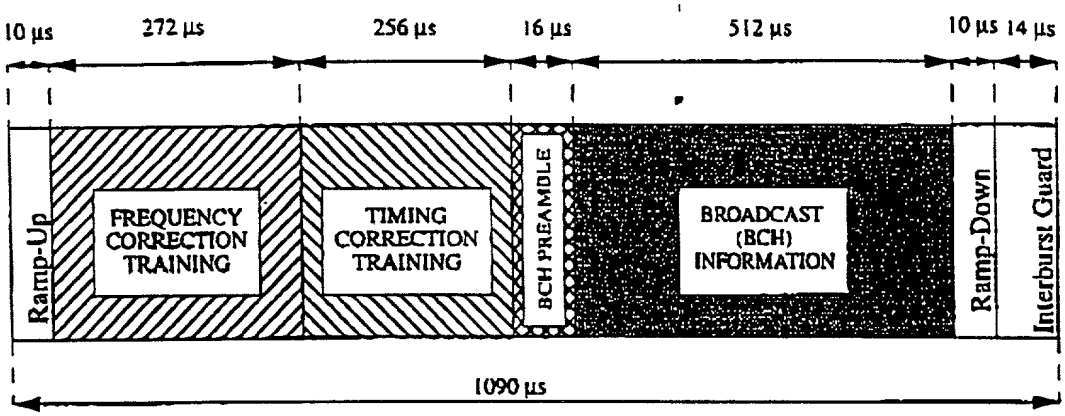

Fig. 14

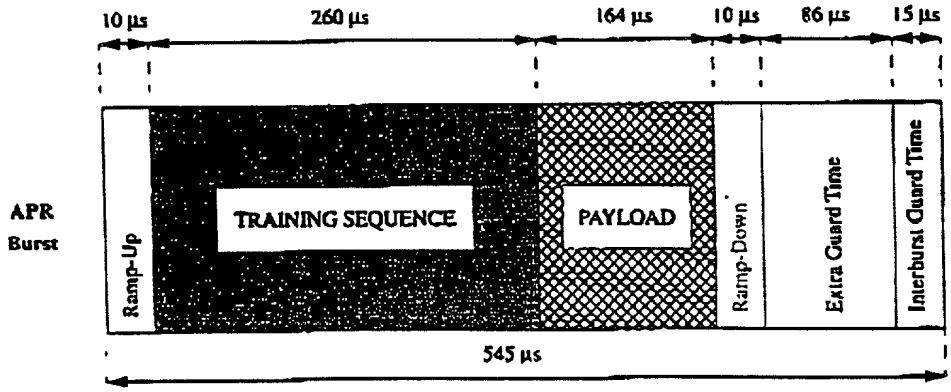

Fig. 15

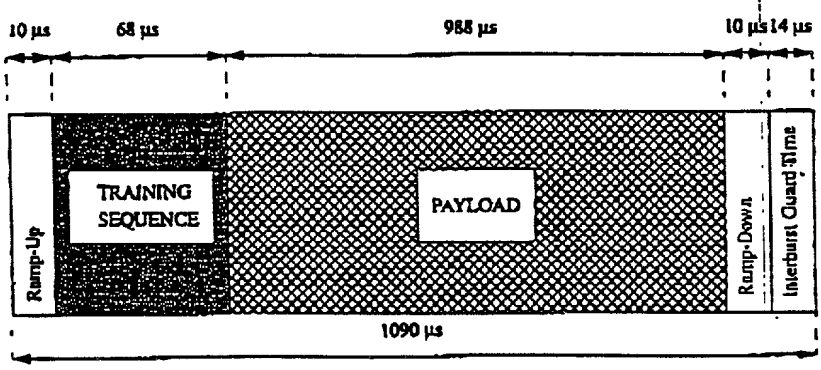

Fig. 16

	Base Station		Remote Terminal
300	Acquire GPS Timing		
302	Determine BCH slot time		
304		BCH ⇒	
306			Scan BCH channels
308			Acquire Frame Timing
310			Acquire Synchronization
312			Build Map of Base Stations BCHs and BSCCs
314			Select Base Station
316			Build CR using UTID and transmit power
318			Scramble CR using BSCC
320		⇐ Configuration Request	
322	Unscramble CR using BSCC		
324	Determine Spatial Signature of Remote CR		
326		Configuration Message ⇒	
328			Adjust timing and power
330		⇐ Traffic Request	
332		Traffic Assignment ⇒	
334		⇐ Traffic ⇒	
336		Send packet ⇒	
338		⇐ Send DA and packt	
340		Send DA and packet ⇒	
342		⇐ Send DA and packet	

Figure 17